

# STATE OF MONTANA

## JOB DESCRIPTION

*Montana state government is an equal opportunity employer. The State shall, upon request, provide reasonable accommodations to otherwise qualified individuals with disabilities.*

**Job Title:** Materials Inspection Aide (Pavement Rater)

**Location:** Helena HQ

**Department:** Transportation

**Division and Bureau:** Engineering /Materials

**Section and Unit:** Pavement Analysis/Pavement Management

**Position Number:** 90812

### **Job Overview:**

This position serves as a Road Rater for the PvMS Management Unit of the MDT Materials Bureau. The position is responsible for monitoring pavement data and video log collection equipment and conducting quality control assessments to accurately determine the severity and extent of pavement distresses and to provide information needed for pavement management and design activities and performing related duties as assigned. The position reports to the PvMS Management Unit Supervisor.

### **Essential Functions (Major Duties or Responsibilities):**

#### **A. Pavement Analysis & Data Collection**

**95%**

Monitor pavement data and video log collection computers (profile, 3D, cameras and inertial measurement unit) to ensure operating and collecting data accurately. Conduct quality control assessments on data collected which determines the severity and extent of pavement distresses and quality of video recorded. Provide information needed for pavement management and design activities.

- Attend preliminary training and quality assurance exercises provided by the Road Profile Analyst to learn and consistently monitor data collection operations and quality; ensure the application of proper protocols for recording data collection and quality control; and ensure proper operation of equipment and application of procedures.
- Assist the Road Profile Analyst and make travel arrangements to accommodate travel schedules and ensure field activities are carried out in a cost-effective manner.
- Monitor pavement data and video log collection computers to ensure they are accurately recording the location using Departmental corridor route naming, mileposts, and lane identification criteria. Edit computer information for correct route location if needed. Assist Road Profile Analyst in determining route sequencing.
- Monitor pavement data and video log collection equipment and troubleshoot errors in real-time in while van is operating at highway speeds. Assist the Road Profile Analyst in observe traffic during the performance of duties, using good judgment concerning safety while working in high-speed traffic, and coordinating with the supervisor or law enforcement as needed.

- Assist office engineering staff to conduct QC/QA activities by determining the type, description, severity levels, and quantification of each distress observed, and recording the information in PathView.
- Use judgment to determine the type of defect, the severity of the defect, and the severity to which the road surface is affected by the defect.
- Accurately measure and record pavement features by in PathView by applying math functions and established data recording protocols. Quantify field data using math functions with an understanding of fractions and percentages; and enter all information regarding pavement condition in PathView. Work with supervisor or CE Specialist verifying data collection cycle completion and verify information availability for upload into the database and video images delivery to ISD.

**B. Other Duties as Assigned**

**5%**

Perform a variety of other technical and administrative work in support of section activities as assigned by the supervisor.

**Supervision**

This position does not have supervisory duties.

The number of employees directly supervised is: 0

The total number of FTE managed (direct and indirect): 0

The position number for each directly supervised employee is: N/A

**Physical and Environmental Demands:**

*Physical:*

- Heavy independent lifting (up to 75 lbs.) of equipment, material samples, etc.
- Extensive travel (more than 1,000 miles/week avg.) within the state by automobile
- Working outdoors in all types of weather
- Operating a personal computer and PDA
- Communicating in writing, in person, and over the phone
- Exposure to extreme weather and high-speed traffic
- Operation of motor vehicles
- Operation of power tools and/or equipment

*Mental:*

- Computing arithmetic operations
- Comparing data
- Compiling information, analyzing, coordinating, synthesizing
- Ability to multi-task
- Ability to meet inflexible deadlines
- Decision-making that affects the public health and safety
- Interpersonal skills/behaviors

- Dealing with the public on a regular basis
- Demands for accuracy in all aspects of work
- Ability to meet inflexible deadlines

The work environment involves dust, extreme temperatures, wind, rain, and snow. Hazards associated with the work can be significant. The majority of the work is performed at active roadways with exposure to high-speed traffic. The risks of the work are such that extensive training in safety practices and procedures is required. Due to the nature of work elements and hazardous tasks such as work around moving traffic there is potential for significant personal injury.

### **Knowledge, Skills and Abilities (Behaviors):**

#### **Knowledge:**

This position requires knowledge of the procedures and sources of information related to identifying pavement distress types; computerized relational databases; mathematical calculations; safety and traffic control protocols and procedures; state travel and expense policies and procedures; the operation, tape measures, width gauges, and distance measuring instruments; and knowledge of basic vehicle maintenance.

#### **Skills:**

This position requires skill in the use and operation of computers with multiple windows and software; measurement instruments of all types; operating field equipment and software; and in reading and interpreting maps.

### **Minimum Qualifications (Education and Experience):**

#### **Education:**

- |   |   |
|---|---|
| <input type="checkbox"/> No education required                        | <input type="checkbox"/> Related Associate's Degree |
| <input checked="" type="checkbox"/> High school diploma or equivalent | <input type="checkbox"/> Related Bachelor's Degree  |
| <input type="checkbox"/> 1-year related college/voc training          | <input type="checkbox"/> Related Master's Degree    |

**Acceptable fields of study include:** N/A

#### **Experience:**

- |   |   |
|---|---|
| <input type="checkbox"/> No prior experience required             | <input type="checkbox"/> 3 years of related experience      |
| <input type="checkbox"/> 1 year of related experience             | <input type="checkbox"/> 4 years of related experience      |
| <input checked="" type="checkbox"/> 2 years of related experience | <input type="checkbox"/> 5 or more years related experience |

**Other Specific Experience:** The position requires two years of experience working independently; working with math and computers.

**License/Certification:** A valid Montana Driver's License is required.

**Alternative Qualifications:**

Post-secondary education and work experience involving various software programs including Microsoft products may be credited toward work experience for this position.

The specific statements shown in each section of this description are not intended to be all inclusive. They represent typical elements and criteria considered necessary to perform the job successfully.

**Signatures**

My signature below indicates the statements in the job description are accurate and complete.

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<b>Immediate Supervisor</b>	<b>Title</b>	<b>Date</b>
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<b>Administrative Review</b>	<b>Title</b>	<b>Date</b>
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My signature below indicates that I have read this job description.

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<b>Employee</b>	<b>Title</b>	<b>Date</b>
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**Human Resources Review**

<b>Job Code Title:</b>	<b>Job Code Number:</b>	<b>Pay Band:</b>
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My signature below indicates that Human Resources has reviewed this job description for completeness and has made the following determinations:

☐ FLSA Exempt☐ FLSA Non-Exempt☐ Telework Available☐ Telework Not Available☐ Classification Complete☐ Organizational Chart attached

**Human Resources:**

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<b>Signature</b>	<b>Title</b>	<b>Date</b>
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